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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,396	02/11/2004	Timothy A. Spahr	1747 (TI-03-12)	1940
40256	7590	05/30/2007		
FERRELLS, PLLC P. O. BOX 312 CLIFTON, VA 20124-1706			EXAMINER CASTELLANO, STEPHEN J	
			ART UNIT 3781	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/776,396

Applicant(s)

SPAHR, TIMOTHY A.

Examiner

Stephen J. Castellano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 18-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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Applicant's election with traverse of claims 1-17 in the reply filed on April 23, 2007 is acknowledged. The traversal is on the ground(s) that the method claims include the limitations of the article claims. This is not found persuasive because (1) no error has been designated and (2) there are limitations within the method claims that will not necessarily be found when the article claim is rejected.

The requirement is still deemed proper and is therefore made FINAL.

Claims 18-31 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 23, 2007.

It is noted that claims 30 and 31 have been withdrawn by applicant and depend from method claim 29. However, the preambles of claims 30 and 31 still recite the fuel container.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites that the two layers are optionally mechanically linked at copular regions. The presence of an optional limitation makes the claim unclear as the metes and bounds of the claim can't be determined since it is not known whether the limitation is part of the claim or not.

The below art rejections are applied insofar as the optional limitation is deemed not to be part of claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellsworth in view of McLeod and Short.

Ellsworth discloses a fuel container comprising an inner barrier layer 16 in intimate unbonded surface-to-surface contact with an outer layer 14. Ellsworth discloses the invention except for the inner layer being polyacetal, the outer layer being a polyolefin and the capacity being 5 gal. or less. McLeod discloses a polyacetal inner layer. It would have been obvious to modify the inner layer to be polyacetal because McLeod specifically teaches an inner layer of polyacetal particularly for its fuel barrier property as stated in paragraph 26. Short teaches an outer layer of polyethylene (a polyolefin). It would have been obvious to modify the outer layer to be a polyolefin to provide structural strength and reinforcement to the fuel container. It would have been obvious to reduce the size of a fuel tank to the size of 5 gal. or less and even 1 quart or less as a matter of design choice in sizing the tank to the apparatus being fueled for the reason of reducing weight and bulk (dimensional) size by reducing the volume of fuel and the dimensions of the fuel tank and to promote safety as the total amount of fuel involved is decreased. These fuel capacities are generally known for reserve tanks, model airplanes, small engine lawn machines such as gas string trimmers and gas blowers.

The dimensional limitations of claims 8 and 11-14 are taught by Short. It would have been obvious to modify the dimensions as a matter of design choice in adapting wall thicknesses to be optimal, not too thick as to waste material and not too thin to risk failure.

Re claims 5 and 6, Official notice is taken that the compositions of polyacetal copolymer of trioxane and ethylene oxide and polyacetal copolymer of trioxane and 1, 3-dioxolane are well known polyacetal copolymers. It would have been obvious to modify the polyacetal copolymer to be one of the two mentioned above in order to make the container from a readily available resin rather than a less available resin.

Re claims 9 and 10, it would have been obvious as a matter of design choice to modify the thickness to be within these ranges as a reduction reduces the weight of the container and reduces the cost of the resin used to make the container.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellsworth in view of McLeod and Short as applied to claim 1 above, and further in view of Spry et al. (Spry).

The combination of Ellsworth-McLeod-Short discloses the invention except for the copular regions. Spry teaches copular regions only at one side of the fuel tank, two layers are coupled together at the fuel inlet and the vehicle computer to fuel container connection only. The surface area of coupling appears to be less than 1% and certainly less than 5% of the total surface area between layers. It would have been obvious to modify the fuel container of Short to have copular regions as taught by Spry in order to provide separate parts which may be replaced if one part becomes damaged alleviating the expense of replacing the entire fuel unit.

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If it should be deemed that the fuel container has copular regions of greater than 5% or 1% then it would have been obvious to reduce one or the other of the connections and also to reduce the surface area of contact to reduce the size of the connection fittings to save weight and cost associated with larger parts.

Applicant's arguments filed April 23, 2007 have been fully considered but they are not persuasive. Re the 112, second paragraph rejection involving optional language, the rejection has been maintained in view of the case law cited because the fact situation presented by the present application is different than the fact situation presented in each of the case law situations.

Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection based on newly cited art.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 571-272-4535.

The examiner can normally be reached on increased flexibility plan (IFP).

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen J. Castellano  
Primary Examiner  
Art Unit 3781

sjc